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# CARNEGIE MAGAZINE

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VOLUME VII    PITTSBURGH, PA., JUNE 1933

NUMBER 3



THE GIANT SABLE ANTELOPE  
GROUP MOUNTED BY R. H. SANTENS  
HALL OF MAMMALS, CARNEGIE INSTITUTE  
(See Page 82)

## THE CARNEGIE MAGAZINE

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VOLUME VII      NUMBER 3  
JUNE 1933

We must not make a scarecrow of the law,  
Setting it up to fear the birds of prey,  
And let it keep one shape till custom make it  
Their perch, and not their terror.

—MEASURE FOR MEASURE



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The Carnegie Institute will be the final home of every worthy collection of pictures and museum objects when the men and women who have chosen them wish to have the world enjoy them.

—ANDREW CARNEGIE

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#### BON JOUR, DR. CONANT!

James Bryant Conant has been chosen president of Harvard—the second scientist to have that office, as against literary presidents, in the long flight of 293 years. Dr. Conant has been professor of organic chemistry at Harvard, and is now just past forty years of age. He has been regarded from the early days of his career as one of the most brilliant of the younger generation of chemists, and is widely known among scientists for his research work in special fields, having received recognition for his studies in botany and his monographs on the green coloring substance in plants. During the World War he was called to Washington, where he served with the Bureau of Chemistry and the Bureau of Mines, and helped substantially in the development of war gas. When peace was made he returned to Harvard, working in chemistry until he was made Sheldon Emery Professor of Chemistry in 1929. In a residence abroad he carefully investigated the research methods of the German universities. His contacts with books and men have been of the widest variety, and his sympathy with life and its problems has developed a breadth of character which commended him for the presidency of Harvard when that great office became vacant. He has shown executive capacity of a rare order, and he is sure to keep the standard of Harvard, in Milton's phrase, full high advanced.

#### THE INTERNATIONAL FOR 1933

Homer Saint-Gaudens has just completed his work in Europe in connection with the International Exhibition of Paintings to open at the Carnegie Institute on Founder's Day, October 19, and is now on his way to Pittsburgh. His reports indicate that the collection will show the usual variety both as to artists and subjects, and that as a reflection of the art production of the year it will range over the always debatable ground from academic conservatism to advanced liberalism.

#### ALL THE WORLD'S A STAGE

In reading or listening to a good many commencement addresses this year they all seem, either consciously or unconsciously, to bear as the root of their flowering this fine sentiment from Pope:

"Honor and shame from no condition rise,  
Act well your part, there all the honor lies."

#### THE DICTION CONTEST

The CARNEGIE MAGAZINE for May announced a diction contest at the Carnegie Drama School, two prizes to be given for the best declamation of the speech made by Ulysses rebuking Achilles in Shakespeare's "Troilus and Cressida." Twelve students took part—seven girls and five boys. They had all committed the long and eloquent passage, and it was delivered with much understanding and intelligence. The three judges awarded the first prize of \$25 to DeLisle Crawford and the second prize of \$15 to Dorothy Moyer.

## IVAN THE TERRIBLE

*A Review of Stephen Graham's Life of the Barbarous Czar (Yale Press)*

IVAN the Terrible was not called by that appellation by his own people. Their epithet for him was the Russian word "grozny," which means something like a continuing and devastating tempest full of deadly thunder and lightning. In this absorbing book Stephen Graham gives us the first substantial narrative in English of this inhuman monster, and we accord it the welcome of a fascinating story, revealing in dramatic detail the career of the most bloodthirsty tiger that ever roamed his unrestrained way through the habitations of mankind. The book splendidly illuminates medieval Russia, and it should have a wide reading.

The Muscovite, Ivan the Terrible—John IV—was born at Moscow on August 25, 1530. His father and a long line of ancestors had been grand dukes of Moscow, and on the death of Ivan's father in 1533 the boy, then three years old, became the reigning grand duke. When Ivan was seven his mother died of poison, and his childhood was passed in a court where fatal jealousies burned darkly on every hand, and where cruel tortures and atrocious punishments were practiced by the ambitious lords of Russia, not only upon their military and tribal enemies but upon each other in the common rivalries of life. As a child, Ivan was taken to the torture

chamber and indured to witness the agonies of these victims of sadistic hate. When he was thirteen he resented the control of his guardian, Prince Shuisky, and sent a company of young men to waylay him, who beat him to death. At seventeen Ivan, who had by this time absorbed a rather profound knowl-

edge of history, assembled the boyars, who were the lords of his realm, and gave them a startling announcement.

Augustus Caesar, he told them, had had a son named Prus to whom he gave the northern part of the world, and after whom Prussia was named. Ivan himself was clearly descended in a direct line from Prus, he said, and he was therefore a son of Augustus Caesar, and he had determined to assume the title of Caesar, or Czar, of Russia. The boyars loudly acclaimed his audacity, and the first Czar of Russia was

then crowned on January 16, 1547, in the cathedral within the Kremlin, or inner citadel of Moscow, amidst a scene of extraordinary luxury and splendor. Coming from the church with the crown upon his head and wearing a velvet robe that blazed with precious jewels, he began to rule his people, without a parliament, a council, or a minister.

In these days a deputation of merchants and soldiers came from Novgorod to Ivan at Moscow to present a petition



IVAN IV

AFTER A CONTEMPORARY ENGRAVING  
BY HANS WEYGEL

Reprinted from Rovinsky's Illustrated Catalogue of Engraved Russian Portraits (1887)  
in the Avinoff Library on Russian Art

for freer commerce with the surrounding country. The presence of some arquebusiers in their ranks gave Ivan a sense of danger, and he caused his own men to make prisoners of the Novgorod delegation, pour oil upon them, and burn them in the public square.

Immediately after his coronation the boy monarch called upon his nobles to bring their daughters to the Kremlin in order that he might choose a wife; and Anastasia was selected because he considered her the most beautiful woman in his realm. Anastasia was a virtuous, charming, and helpful consort, and during the thirteen years of her life as Czarina she kept the brutal instincts of her husband under partial control.

The Tartars came from the east against Russia nearly every year, and with a determination to suppress their incursions, Ivan assembled a great army and after a brilliant campaign captured Kazan, their principal stronghold, adding large cities and a fruitful territory to his domains. In commemoration of this victory he built a cathedral in Moscow, which still stands today in the Red Square, and is called after an itinerant "fool in Christ," a traditional and venerated figure in Russian religious life, who cursed him in the streets of Moscow as a child of the devil—the Cathedral of Vasilly Blazhenny (St. Basil).

We have just said that Anastasia kept his brutal instincts under but a partial control. What his record of atrocity without her restraining influence during those thirteen years of their married life would have been we can only imagine; for soon after their marriage, when a deputation of citizens came from the city of Pskof to present a petition of grievances, he repeated his favorite act of pouring oil upon them and burning them to death. While this outrage was taking place, his messengers brought him word that Moscow was on fire, and he turned from his fiendish sport to rescue his consort from the flames and retreat to a place of safety, returning next day to find that the entire city had been destroyed by the flames, with

the exception of the inner walled citadel of the Kremlin. His confessors, who believed in black magic, witchcraft, and sorcery, told him that the fire was caused by the incantations of a noble family known as Glinski; and without a trial he ordered their execution by torture, killing some of them in their refuge in the holy sanctuary.

But Ivan now began to look upon the destruction of his capital not only as an act of sorcery but as an act of God—a somewhat inconsistent theory—and he thereupon called the bishops and the nobles together, made a public confession of his sins, and promised to be good. Moscow was rebuilt of oak and cedar, and the youthful Czar declared that he would think now of nothing but the happiness of his people. The laws of Russia were in a very confused state, ordinances which applied in Moscow being ineffective in other cities; and Ivan called his lawyers together and revised the statutes into a general system of jurisprudence.

Upon learning that his contemporary, Henry VIII, had despoiled the English monasteries, Ivan undertook a similar policy in Russia. His clergy were grossly illiterate and idolatrous, few of them being able to read; and the Czar called a convocation, at which he informed them that all of their houses and lands were now the property of the crown; and he told them that he had set up a printing press in Moscow, and that in future, instead of learning their breviaries by word of mouth, he would require them to memorize their scriptures and their prayers from the printed page.

Riding home from one of his victories, Ivan was met by a messenger who informed him that Anastasia had given birth to a son. He was so overjoyed by this news that he begged the man to accept both his horse and his mantle, but the messenger discreetly declined the gifts. Instead of rushing to the bedside of his queen, however, the Czar tarried two days and two nights in the monasteries for confession and prayer; and then, when he arrived at the

Kremlin, he publicly removed his mail, cast aside his sword, donned his imperial gown, and entered the royal chamber, where Anastasia embraced her hero. The infant Dimitry lived only a few weeks; and before the end of a year another son was born, who was christened Ivan. In time, a third son, Fedor, was born. Then on August 7, 1560, the gentle Anastasia died, leaving the monster unchained from her spiritual bonds.

The Czar soon took a new wife, and when he tired of her he sent her to a monastery and took another, until he had chosen seven in all, beating Henry's record by one wife, besides many companions outside the marriage tie.

Ivan discovered that the widow of a noble whom he had suspected of treason was living in a monastery under the name of Mary Magdalena, and he sent his guards, who murdered her and her five children. Alexey Adashef, an intrepid general who had won many of Ivan's victories, incurred the Czar's displeasure, and for nothing but the royal whim he was tortured and slain.

The Czar always carried a long wooden staff with a steel point, with which he now developed the habit of striking people down, and when they had fallen, he would beat them to death. One day he gave a sinister glance at Prince Andrew Kurbsky, his friend and companion from childhood. The prince was wise enough to make his escape from the capital that night and take refuge in Poland, whence he addressed this letter to Ivan:

To the tyrant, unexampled among the most unfaithful lords of the world, heed these words. In the confusion of grief in which I am now, I can say little, but it will be true. Why do you bring torment upon the strong men of Israel, the glorious leaders of war given thee by the Almighty, shedding their holy, victory-bringing blood in the churches of God? Did they not burn with ardor for the Czar and Fatherland? By slanderous invention thou hast found the loyal to be traitorous, Christians to be sorcerers, light to be darkness, and sweetness bitter. Was it not by these men that the yoke of the Tartars was broken? Was it not they who took the German fortresses to the honor of thy name? And our re-

ward is destruction. . . . Beware of the dead, those killed by thee; for they stand around the throne of the Almighty demanding revenge. The army cannot save you, nor can the words of flatterers render you immortal.

It was well for the author of that letter that he was beyond reach of Ivan's staff when it reached the royal eyes. But the Czar answered it, with many abusive words. "My spiritual needs," he wrote, "are supplied by God's grace, the Immaculate Virgin Mary, and the Holy Interceders. Instruction from men I do not ask."

Ivan now began to cherish suspicion against nearly the whole body of his nobility; and this led him to form a bodyguard of young men chiefly taken from the middle class, to whom he gave extreme license with wine, women, and thievery. It is a curious light on the times, however, that there was no insurrection, no revolution, really no voiced opposition to his aggressions against the lives and liberties of his subjects. The Russian people looked on their Czar as a heaven-sent master, to whom they gave their obedience, often at the cost of their lives.

One afternoon during a court reception Ivan called a courtier to him and said: "I am going to make you Czar of Russia." Thereupon he invested the astonished noble with his crown, scepter, and robe, and declared that all present must obey him as the supreme ruler. But before the man could even smile in his new honors, Ivan shouted at him: "You will now see that I, who can make a Czar, can unmake him!" and tearing off the imperial insignia, he struck his dagger into the man's heart right there on the throne.

Novgorod was the most flourishing city in Russia, and many of its citizens had acquired great wealth and influence. In spreading their commerce, they sent their agents into many foreign lands; and it came to the ears of Ivan that words of censure had been uttered abroad against his cruelties. In December, 1569, enraged by this information, the Czar set off with a





CATHEDRAL OF ST. BASIL THE BEATIFIED IN MOSCOW

BEGUN IN 1554 BY IVAN THE TERRIBLE TO COMMEMORATE HIS CONQUEST OF KAZAN

Reproduced from "Les Voyages du Adam Olearius" (1719) in the Avinoff Library on Russian Art

large army, his son Ivan and many nobles being with him, intent on chastising the city. On January 2, 1570, he arrived at Novgorod, and placing his troops around the city in order to prevent the escape of the inhabitants, remained there for a whole month, and every day some of his despairing subjects were brought before him in companies of one thousand or more and condemned to death by torture in the public square, with the satanic ruler gleefully beholding their agonies. While there were many ways of inflicting pain, his favorite method was to thrust a spear through the back of the body and leave the victim impaled until death relieved his sufferings. Others were roasted over slow fires, and still others cooked in huge frying pans. More than fifty thousand of the citizens of Novgorod were executed, all the wealth of the town was confiscated, the golden vessels in the churches were taken over, and the renowned city—known throughout Europe as Novgorod the Great—was blighted beyond the power even of time itself to heal her wounds.

On his return to Moscow, Ivan announced that he would put an end to treason forever, and he arranged his instruments of death as one would provide entertainment for a county fair. Three hundred victims—men, women, and children—were brought before him, for whom he had stakes with stacks of fagots around them, his frying pans and slow fires, gallows for hanging people upside down, and pens into which the victims were thrown to hungry bears; and all day long the dreadful spectacle continued.

While this act was going on, there arrived in Moscow an embassy from Queen Elizabeth of England, seeking a grant of commercial privileges for the English merchants; and Ivan immediately asked the ambassador for the hand of the Virgin Queen in marriage. When her representative brought this proposal before Elizabeth, she naturally objected that the Czar was then married

and living with his wife—the seventh. But Ivan said significantly that nature could be trusted to remove that obstacle; and he added, for Elizabeth's encouragement, that her sister Mary had married the king of Spain and here was he, a greater monarch, suing for her hand. But the negotiations came to naught, Elizabeth treating the proposal with secret contempt.

Ivan called a convocation of his bishops, and when they had assembled in the Kremlin he told them in much anger that they were given to avarice and vice; and each morning he chose one of them, who was thrown to a hungry bear, until six of the poor clergymen had been thus devoured, after which the discussion of religion was taken up in a formal way.

While he was making war on Poland, the Tartars came and again destroyed Moscow in a conflagration in which a hundred thousand of its citizens lost their lives. Ivan led his army into the Tartar country and inflicted punishments upon those invaders from which they did not recover for a century. In the last days of his reign he won the vast territory of Siberia from the Mongols, and greatly extended his possessions in all directions.

The supreme, hateful, diabolical crime of Ivan's life was reserved for his last days on this earth. The wife of his son and heir, Ivan the Czarevitch, displeased him in some detail of her dress—she should have worn three petticoats instead of two—and the Czar called her immodest and struck her. Her young husband interfered and reproached his father for the assault. Their words grew in anger, until the Czar raised his staff and brought it down with great force upon his son's head. The boy—for he was only twenty-one years old—fell to the floor, whereupon the terrible one, wild with rage, continued to beat him until he had become unconscious. Then he fell to his knees and implored him to come back to life, but the Czarevitch died, with his wife and the whole court looking on.

The Czar's spirit was broken by this murder and, calling his confessors to him, he compiled a list of more than three thousand names of individuals whom he had thus pitilessly killed, not including whole populations slaughtered, such as those of Novgorod. He then fell sick, and all Russia prayed for his recovery, as their lord and master.

He called his soothsayers, wizards, and magicians to his chamber—three score of them—and they told him he would die on that day. In saying this, they took no chance on the art of prophecy, for they could clearly see that his death was fast approaching; but when they uttered the words of doom, he shouted that he would execute them all immediately. They begged him to wait until the sun sank; and surely enough before dark the barbarous beast had taken his flight into eternity. His death occurred on March 18, 1583, when he was fifty-three years old.

Ivan was succeeded by his son Fedor, a weakling, who was permitted to hold the name of Czar under the control of Boris Godunov for fourteen years; and upon his death Boris seized the throne and became ruler in fact, promoting the trade and extending the territory of Russia. Recognizing the gross intellectual inferiority of the Russian people, Boris imported foreign teachers and sent young Russians abroad for study, especially to England. He also permitted the building of Protestant churches in his dominions. On the death of Boris, Mikhail Romanov was chosen Czar in 1613, being the first of a family which ruled Russia until their extermination in the lonely house of Ekaterinburg in 1918.

Was Ivan the Terrible mad? We think not. His atrocious cruelties were doubtless prompted by a spirit of sadism—the love of inflicting pain for the purpose of enjoying human agony. But the savagery of his conduct was not unique; it had its counterpart in his day in nearly the whole of Europe. At the time of the slaughter at Novgorod Queen Catherine de' Medici of France

was directing the massacre of St. Bartholomew; Spain was reveling in the tortures of the Inquisition; Italy was burning all heretics; and the daughter of Henry VIII was inflicting those outrages on her dissident subjects which gained for her the opprobrious name of Bloody Mary.

Have we recovered from these sadistic instincts in our own day? Is there not something of Ivan the Terrible still dwelling in the human heart? With what joy did we sink the ships of our enemies filled with our fellow creatures in the World War! And to what an advanced degree of efficiency did we not mutilate and kill their chivalry, with prayers of thanksgiving in a prolonged slaughter through those long years, while they on their part strove to outdo our savagery! Have we in the mass progressed beyond the inhuman standards of Ivan the Terrible? Certainly not, so long as war endures, with its ever growing horror.

S. H. C.

## A POGANY-ILLUSTRATED RUBÁIYÁT FOR TECH

JOHN L. PORTER, chairman of the Carnegie Institute of Technology Committee, has recently presented a beautiful copy of the *Rubáiyát* of Omar Khayyám to the Tech Library. This unique edition, containing the famous rendering in English verse by Edward Fitzgerald, will be especially prized by the Library in the College of Fine Arts collections for the many charming illustrations by Willy Pogany.

There is a delicacy of line and color in the work of this Hungarian-born artist which brings out perfectly the romantic atmosphere in these old Persian verses. Only two or three verses occupy each page, most of which are illuminated by exquisite black-and-gold line drawings at the head. In contrast with the black and gold are many gorgeous full-page illustrations in color.



## THE PIONEER RODGERS' PLANE GOES TO THE FAIR

*Relic of the First Transcontinental Flight Now on View in Chicago*

PITTSBURGHERS who visit A Century of Progress in Chicago in the coming months will recognize an old friend when they see in the parade of transportation the Wright biplane in which Calbraith Perry Rodgers first flew across the American continent.

In this frail and unairworthy plane Rodgers, a Pittsburgh boy, in 1911 made the first transcontinental flight. The following year he was killed while flying in California; and in 1917 the hero's mother presented the famous plane to the Carnegie Institute, where it can be seen suspended in the Hall of Transportation, except for the duration of its visit to the Fair. As the Smith-

sonian Institution in its possession of the Lindbergh plane cherishes an epochal chapter in the history of aviation, so the Institute in the primitive Rodgers plane holds another.

As we compare the hazards and vicissitudes of this audacious air experiment with the safety and efficiency of contemporary coast-to-coast travel only twenty years later, one pays new homage to the miracles of the twentieth century.

Perry Rodgers was born of history-making stock—the great grandson of Commodore Matthew Calbraith Perry, who opened the gates of Japan to the commerce of the United States, and the



AN OIL PAINTING OF RODGERS WHICH HANGS BESIDE HIS PLANE AT THE INSTITUTE

grand nephew of Commodore Oliver Hazard Perry of Lake Erie fame—so the mantle of daring was his by inheritance. Back in the days when planes were still very dangerous flying machines, he entered the aviation school conducted by the Wright brothers, beginning his training on June 11, 1911, and was almost immediately proclaimed their most apt pupil. After a very few weeks of instruction and testing he attended the international meet in Chicago in August and there he established a record of twenty-seven hours of flight in the space of nine days. Encouraged by this achievement, he determined to try for the Hearst prize of \$50,000 offered for an Atlantic-to-Pacific flight to be accomplished in thirty days.

He took off from Sheepshead, New York, on September 17, 1911, and landed in Pasadena, California, on November 5, forty-nine days later. He did not win the purse but as an incident to the flight he shattered the world's long distance cross-country record by a sustained dash of 214 miles! The highest speed he attained was in an eighty-seven-mile stretch over which he traveled at the amazing rate of eighty-five miles an hour, although his average flying speed for the whole trip barely exceeded fifty miles an hour. Of the forty-nine days he was on the way, his actual flying time was a little less than three days and a half. He literally spanned the continent by leaps and landings, for he brought his machine to earth sixty-nine times in the course of the trip.

As to his trials and tribulations, he had twelve accidents en route and was forced to replace eighteen wings. The only parts of the original machine to endure the entire struggle were two stanchions (props) and the rudder. These frequent casualties were anticipated, however; for a special express car carrying mechanics and spare parts traveled in the trail of the flight. It was considered a point for prideful and exciting comment when on several occasions the plane outdistanced the ac-

companying train by an hour or two.

Rodgers' destination was the extreme West coast but when he set out on November 5 from Pasadena for Long Beach—the last lap of the journey—he had a bad fall in which he was injured, resulting in a month's delay. Pluckily resuming his grilling flight with both legs in plaster casts, he finally reached his objective thirty miles beyond on December 10. For official records, therefore, United States Army and Navy men assumed the flight to have been completed at Pasadena. While doing exhibition flying over Long Beach on April 3 of the next year, this dauntless flyer crashed to his death in the shallow water of the bay, and his body lies in Allegheny Cemetery, at Pittsburgh. By such sacrifices has the air been conquered.

In the light of present-day nonstop flights and the acceptance of modern air travel, Rodgers' feat seems anything but momentous, but at the time of its occurrence it caused a national sensation. To commemorate the naming of the Pittsburgh airport, near Aspinwall, in his honor, the Aero Club of Pittsburgh dedicated a bronze tablet, and placed it beside his plane in the Institute on the fifteenth anniversary of his arrival in Pasadena.

## A WORTHY SEAL



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THE CARNEGIE MAGAZINE presents in enlarged size the newly adopted imprint—CIP in monogram—of the Carnegie Institute Press, which hereafter will stamp all the printing issuing from this Press. As fine crafting is identified by a hall-mark that sets it apart, so beautiful printing deserves a distinctive seal.

The Carnegie Institute Press creates every piece of printing that is used in the Institute—from a magazine, posters, catalogues, reports, and programs, to call slips, notices, and checks.

## CHARTS AND COMPASSES

*Commencement Address, Carnegie Institute of Technology*

BY JOHN C. MERRIAM

*President of the Carnegie Institution of Washington*



WHEN Columbus sailed from Palos in August, 1492, he had just enough of vision regarding his objective to nourish a germinating hope, and little enough of assurance to make the chance of his voyage

exciting. As primary features in equipment, he possessed a burning enthusiasm for adventure in the unseen world to the west, and had fairly safe means of guidance as to direction through a mysterious instrument, the compass.

The navigating instrument which Columbus used was a sufficiently reliable basis of reference for direction to make possible steering a safe course across the sea. What held the needle to its position was then an unsolved mystery. And even now, after four hundred years of investigation, these influences of earth magnetism are nearly as great a problem as in 1492. We know that the forces are bound up in the structure of the atom, and that in the compass they seem to reflect a geographic or space influence concerning the whole earth.

It is interesting to note that the degree of dependability of the compass came into question as Columbus moved west. In time it appeared that the needle no longer pointed north, and doubt arose as to the wisdom of continuing the voyage. If Columbus could have obtained the complete story of this type of instrument, he would have found that not only does it change direction from place to place, but it

varies also from time to time in the same place. So today at Palos, from which he sailed, the compass points about fifteen degrees west of the direction indicated in 1492.

Columbus moved out into a new world which seemed a natural extension of the region in which he lived, and yet it was veiled and mysterious. In some respects, his vision of the unknown geographic region to be traversed corresponds to the order of experience facing youth, as it adventures into new regions of time. In neither case is the transition abrupt. The flood of years just ahead does not appear to present possibilities more different from those of the moment than were the waves that danced under sunset lights of the western ocean unlike the sea from which Columbus sailed.

At the time of this historic voyage uncharted geographic regions were made relatively safe, so far as direction and points of reference were concerned, either by the dependable courses of the stars or by the mysterious power which held the compass needle in position.

Uncharted time, as we look out toward it, may seem less mysterious because we have possessed and used time in many most matter-of-fact ways. And yet there is no mystery greater than that embodied in what the coming years hold, and how we can meet what they will present.

The specific purpose of my remarks today concerns the problem of guidance and lines of reference available on this excursion into time. What, for example, could one say regarding possibilities of direction and guidance in time comparable to that furnished for geographic journeying by use of the mysterious but effective means avail-

able in that kind of exploration? Are we to find for movement through time instruments or principles that are comparable to those which orient us with reference to direction in space? Shall we be able to discover means of determining extent to which changes are to be expected? Are we to find that, as in geographic adventuring, such guidance and determination of direction may come from things that are mysterious and yet reliable for special purposes?

Some may assume that the program and laws of civilization have been so satisfactorily laid out that, rather than a compass for steering courses in uncharted regions, there is need for means of breaking away from fixed lines of travel. But the story of time as we know it does not support such a view. There may be reason to expect more range of variety and extent of change through time than would be met in journeying up and down the seas. Over the ages the unexpected and untoward experiences of mankind have been so numerous that one properly inquires whether we have given full recognition to guiding influences and points of reference as means for aiding that development or progress in which we profess to be interested.

The possibility of furnishing adequate guidance for mankind and his civilization through the ages depends upon ability to attain success in two extremely difficult tasks. One involves discovery and formulation of instruments or principles making possible an appreciation of the major forces of both the continuing and the changing types as they operate through time. The other problem concerns the means for cultivating in the stream of generations, as they pass, a true understanding of these principles and their human significance.

The first task is a responsibility of the investigator. The second relates to education. On this occasion I am concerned principally with the second phase of the question. And specifi-

cally I am interested in the point of view which may be taken when one passes from the more formal education of the curriculum to the stage of self-education and experience of later life. This is the status of graduating classes at the moment.

The relation of education to this question of continuity in guidance is illustrated by consideration of the major educational influences to which you have exposed yourself in these recent years. For use in this discussion we may consider education as having, among other purposes, four outstanding objectives:

1. To aid you in the effort to know yourselves well enough to judge your capacities and your future opportunities.
2. To help in developing initiative and constructive mental power.
3. To make available such facts from the vast accumulated store of knowledge as you can use to advantage in your chosen activities.
4. To give the power to profit by values of experience and wisdom as tested through the ages.

Of these several attitudes in education, the first, relating to capacity, presents difficulties, but commonly the answer is given through expression of personal interest in the work for which one is best fitted.

The second concerns development of ability and love of constructive work, without which life would be stale and dreary.

The third represents routine accumulation of facts, as grist for the mill arising from materials furnished by the first two purposes.

The fourth objective concerns the nature of continuing experience, with values derived from age-long human judgment. Without the contribution derived from this view, each generation, for the time of its ephemeral existence, would begin over again the task of coming to know the significance of the infinitely complex and changing universe of things and of people in which it lives.

The possibility of passing over to each generation the values of judgment or wisdom of the ages regarding this changing world is the most difficult and perhaps the most important problem of education. It is the most difficult because it represents aspects of vision concerning what is derived through actual experiencing of changes in time, such as youth can have had only in small measure. It is perhaps the most important because it relates to the purposes and accomplishments of living. To be sure, life can be lived without such approximations to knowledge, but it cannot have that definition of aims or objectives which seems so clearly essential to satisfactory living.

Some years ago I stood for the first time on the summit of a great pyramid rising above the jungle in Yucatan. As far as the eye could reach across the plain were groups of shattered and decaying buildings, ruins of a vanished civilization. Here and there were humble dwellings inhabited by descendants of the builders and artisans who framed and used these ancient cities. A friend standing with me said he was impressed especially by the depth of a great silence. My comment was that this vision of the jungle, engulfing a vast wreckage representing splendid accomplishments in architecture, art, human organization, religion, gave overpowering appreciation of what happens when education is completely interrupted. There remains in that region today a vigorous and capable people, lovers of the finer things—but the charts, plans, ideals, visions of what might be accomplished, the accumulated experience and wisdom of ages, are gone.

But where, as in our own land at present, the currents of time and life flow on without serious deviation or interruption, the significance of possibilities such as those illustrated in the Maya civilization of Middle America have little weight. And sometimes, carried by the momentum of elements moving around us, we may hold to the

mere superficial appearance of things, giving little attention to the greater instruments and principles which, like the compass on the voyage of Columbus, can give points of reference and direction, without which movement may become aimless and progress only a matter of chance.

What would happen if with us education were stifled for but a single generation? What that is now carried along continuously represents elements that are essential to such progress as we observe?

Today we stand secure in the feeling that the structure of civilization may not be broken. Such has probably been the attitude in every country which suffered a fate like that of the early American culture. How safe are we today in spite of science and education? Can we forget that it is only a few years since in the mad rush of wealth accumulation it seemed as if in this country some believed the mathematics of business in which two and two made four to have been set aside, and that, under modern conditions, two and two made five, or seven, or nine?

Now, as always, the real questions concerning security are not to be answered by consideration of that infinite group of superficial details which to many may represent life, but which time proves to be only surface gloss. It is a strange phenomenon that much of what is most important to us we come to know commonly through abnormal conditions. It seems almost necessary for us to be ill before we give attention to what constitutes the requirements of health. This is true not only of digestion and circulation, but of our mental, social, and spiritual well-being also.

It frequently requires what we call a "jolt" to make us aware of digestion or social responsibility. We seem to need such an experience as the vision of an extinguished civilization to make us inquire regarding security as to structure and course of that human organization which we help to build.



Considering the progress of civilization from a somewhat different point of view, it is sometimes said that our advance may represent any or all of three methods.

One is just chance; a second is permitting nature to take its course, on the assumption that there are underlying natural laws that will carry us forward slowly, surely, and perhaps at great expense; a third method is by guidance through use of our intelligence.

That "just chance" rules the world is to most persons expression of a state of mind that indicates either lack of vision as to what exists, or a special use of the word "chance."

That, according to the second method, great laws or modes of procedure underlie and guide the movement of events in nature about us, in the history of man in early stages of his development, and now in the period of our awakening, becomes increasingly clear with careful examination.

That, as the third possibility, human intelligence can plan progress over the years beyond is also evident, within limits which seem to widen as interest and attention in the problem deepen.

It is also increasingly clear that planning the development of our world, and of man in it, can succeed only where adequate attention is given to those great principles which underlie nature and human life. Much of what we have erroneously thought to be advance has taken place with little regard to what the world and man really are, and without recognition of fundamental qualities and modes of growth established by milleniums, or by vastly longer periods of development. The record of man's work as assembled in history is only too largely a succession of shattered hopes, unfulfilled desires, broken treaties, and suppression of movements designed to accelerate progress. Out of the accumulating heap which represents the past we have surviving values of a few features continuing with unabated influence.

With special reference to the problem of charts and compasses and guides, both for civilization and for the experience of this graduating class, it is the relations of chance, great principles or laws, and the application of intelligence that I have particularly in mind.

Of the principles seen in the natural development of life, we may think of one class as operating through long periods as stabilizing agencies, and of another group which expresses methods or modes of change. The first, like gravity, may hold the world level; the other, like evolution, may indicate that it will change and in a particular direction.

The task of determining what are stable and dependable elements, and what are indicators of changing conditions, presents almost infinite difficulties, but real progress has been made. Perhaps we do not know more regarding the true or fundamental nature of these features than has been learned regarding earth magnetism and the compass. But there is in them evidence of reliable guidance through time comparable to that of the compass for use over the seas in space.

To present a discussion of all instruments or conceptions which might serve as compass or chart through time would require a compendium of general knowledge. The idea may be expressed through illustrations which your own knowledge will extend. From the broader field of science, I have no hesitation in stating that the principle of development, or evolution, beginning with the origin of stellar systems, reaching through vast ages covering the story of this earth, and leading into development of human life and institutions is one of the greatest aids to vision that knowledge has yet produced. Microscopes permit us to peer into infinite littlenesses; telescopes give us views across great stretches of space. Broadly conceived, evolution is something which shows us the movements in time, and presents also suggestions

concerning the future which intelligence cannot avoid.

Twenty years ago H. G. Wells published a little book, "The Discovery of the Future," a document of compelling interest based upon this principle. I am moved to quote the following lines: "We perceive that man, and all the world of men, is no more than the present phase of a development so great and splendid that beside this vision epics jingle like nursery rimes, and all the exploits of humanity shrivel to the proportions of castles in the sand."

From the point of view of fundamental vision in human relations I would recognize the Sermon on the Mount and associated documents as one of the greatest guides for future conduct. To me it is not merely a point of view in religion, but is a statement wholly sound in ethical principle, in definition of effective human relations, and one following closely our fundamental scientific conceptions.

I would place the principle of individual liberty, basing itself upon self-respect and constructive ability, as properly something in support of which any sacrifice might be made and on the basis of which future civilization must in some measure rest.

Let there be no doubt also that recognition of responsibility to the community, with the principle of human service, represents a phase of relations which is of infinite value for the future.

And, for the inner life, there can be no question that the basic principles which have dominated great art, great literature, and the great religions, if given opportunity for adequate expression, are among the most fundamental interests both for stabilizing and for development of effective and satisfactory human living.

One of the problems in use of such features as have been described, lies in the difficulty of making clear to those having as yet little opportunity for experience how important these findings may be. Much that you as students

have received in education will not begin to obtain its value until through the illuminating and inspiring influences of contact with realities in later life you come to appreciate the meaning of what has been said or done.

Some of your educational experiences may resemble inoculation, which can be expected to develop only when you reach a place in time or a special situation in life where your intellectual food and drink are favorable to development of that germ—and it will then grow into a culture that will aid in clarifying vision.

In education the element of inspiration holds a sacred place in which, as it were, there is passed on the fire of living souls. Under the illumination of personal contact with great realities, or through touch with minds lighted as if by fire from on high, vision awakens in you new vision, and the deeper mysteries take on clearer meaning.

But we must not forget that the relation of great principles to future voyaging is not to be considered solely in terms of civilization broadly—for the possibilities of making a living in the particular year following graduation, it is a question whether many would not seem to be in better business position had they taken apprenticeships to work their way along. But an education is needed most as a basis for building such as may become broad and ultimately high. It is not merely for the year after graduation but for all of life that one prepares. To what extent will the special guides which you select give light and wisdom needed in those later stages of life when the greater questions come to replace the lesser?

In this day of great discoveries, big business, and world politics, civilization and the individual face situations through which only the most refined vision can penetrate. Just as in the physical and biological sciences, intelligence has found the way to unbelievable attainment. So in study of

man and his future I look to see developments of corresponding magnitude open the way to wider understanding, and to such a comprehension of navigation through the mists of time as may meet our coming needs.

No generation of all ages has had greater vitality, and finer enthusiasm for its task, than the one which now moves into the field of control. May its strength and its vision bring results even more important than those which crowned the efforts of Columbus in his voyage to what was then a place in the future of discovery, but has, in time, become our home.

### THE PHENIX BOOKS OF MR. HITLER

A GREAT meeting was held in Carnegie Music Hall on May 10 to protest in the name of all the educational institutions of Pittsburgh against the burning at that moment of the books written or translated by Jewish authors of German birth. The organizations represented included the University of Pittsburgh, the Duquesne University, the Carnegie Institute, the Carnegie Institute of Technology, the Pennsylvania College for Women, the Western Theological Seminary, the Pittsburgh-Xenia Theological Seminary, and other institutions. The destruction of the books had been consummated by orders from the responsible heads of the German Government; and the occurrence was denounced as an act of intellectual sabotage against the welfare of the human race. No part was taken in the meeting by any Jewish citizens until near the conclusion of the meeting when, in a dramatic climax, one hundred Jewish students from local colleges marched across the stage and deposited copies of one hundred books which were then being burned in Berlin, beginning with the Old Testament.

These books, all by Jewish authors, become part of the collections of the

Carnegie Library. Through his oppressive measures Mr. Hitler thus promotes the circulation of the very books which he sought to destroy.

### REFUGE IN LIBRARIES

IN 1932 in forty-three cities with populations of more than two hundred thousand each, there were 12,000,000 more book withdrawals from public libraries than in 1931. The total was 170 millions. Of these millions Chicago reported fifteen, New York thirteen, Los Angeles twelve. But in per capita book borrowings Cleveland and Seattle were in the lead, with fractionally more than eleven books per citizen, while Chicago people took out a shade under five books per person."

"Commentators will juggle these facts and figures ingeniously, to prove one thing and another about what and how much people read. The one thing that is obvious and interesting is that books are appreciated and enjoyed by the masses. Librarians have noted during the years of depression an increasing demand for informative and inspirational reading. The public libraries have been a morale-sustaining factor, it would seem."

To which excellent editorial comment from the Pittsburgh Post-Gazette, Ralph Munn, director of the Carnegie Library, adds that among the ten largest cities of the United States Pittsburgh stands tenth in population and eighth in the number of books borrowed from its public libraries. In book borrowing per capita it takes third place, with its record of 7.3. Only Cleveland and Los Angeles, among the first ten cities, lead Pittsburgh in this respect.

### BOOKS

It is from personal experience that I feel that there is no human arrangement so powerful for good, there is no benefit that can be bestowed upon a community so great, as that which places within the reach of all the treasures of the world which are stored up in books.

—ANDREW CARNEGIE



## THE GARDEN OF GOLD



JASON, why do we have so many bandits—so many bad men of every kind—in America? There is not a day but brings forth a story of violence. Did you have bad men in ancient Greece?"

"Penelope, there have always been bad men, in every country, in every age; but we had fewer of them than there are today in America."

The Gardener was reflecting and Penelope waited for his further comment.

"I attribute American crime," he said, "to bad manners."

"That's a curious thought, Jason. Why do you think bad manners and crime run together? Are not some of our criminals men of the schools, men of family, men of tradition, men of polite conduct?"

Jason laughed. "You have put my theory in danger, Penelope, but you have not overthrown it. All those things you name—polite conduct and the rest—do not necessarily imply good manners."

"Perhaps not, Jason—and do you know that I am just thinking of a thing which George Washington urged upon our people? In his Farewell Address he charged them to strive for the progressive refinement of manners."

"Ah, that's it, Penelope, that's the central idea in the educational scheme of ancient Greece. Good manners, as we were taught, meant something more than what you designate as polite conduct. Good manners, as Socrates taught it, and as Washington advocated it, meant an inward control of life, in speech, habit, bearing, and thought. Socrates insisted on the moral aspect of education to the end that a boy would neither do, say, nor think anything that violated good manners; and to such an extent did this ideal pervade the Greek nation that crime actually disappeared. On one occasion a Grecian

ruler who was challenged when he declared that good manners had put an end to crime, chose a young girl of great beauty, dressed her in white raiment, gave her a purse of gold to hang on her wrist, and after advertising his purpose so that all men would know of it, he caused this maiden to walk the length and breadth of the land, without a guard or escort; and no man accosted her or molested her. The good manners of the people saved her on an otherwise dangerous pilgrimage."

"Jason, do you think that any American girl could walk under such circumstances from New York to San Francisco?"

"What do you think about that yourself, Penelope?"

"I won't say."

### GOLDEN FRUITAGE



ELMER KENYON

Elmer Kenyon, the able head of the Department of Drama at the Carnegie Institute of Technology, is constantly applauded for his felicitous and pointed comments on the theater. Mr. Kenyon has directed that \$35

which he received for some public lectures be credited to the 1946 Endowment Fund for the ultimate use of the Drama School. This sum at compound interest will be worth \$69.65 when the Carnegie Corporation matches it two for one, making the final value of the gift \$208.95 on the date of settlement.

With this issue of the Magazine the money gifts recorded in its pages reach the total of \$1,012,101.92.

## THE GIANT SABLE ANTELOPE

BY ANDREY AVINOFF

*Director of the Carnegie Museum*



The giant sable antelope, coveted goal of every hunter, and the high prize among the trophies of the 1930 expedition to Angola conducted by Ralph Pulitzer, of New York City, was presented to the Carnegie Museum by the distinguished sportsman at the conclusion of his hunt, together with the rest of the rich scientific collections gathered by him from the equatorial regions of Africa. A habitat group in which this handsome antelope is the dominating center has just been installed in the Hall of Mammals, and a colored reproduction of it appears on the cover of the Magazine.

Our readers may recall the interesting account given by Rudyerd Boulton, the companion of Mr. Pulitzer, concerning the circumstances under which this animal was secured. Justly called the monarch of its tribe, it is by far the rarest and stateliest representative of the clan of antelopes which is so abundant in species on the African continent. In an extremely limited territory of some forty by eighty miles in the region of Angola, the Portuguese possession in West Africa, where it is still to be found in small numbers, the animal is rigorously protected by strict hunting regulations, and we should therefore consider ourselves especially fortunate that a permit was granted to Mr. Pulitzer, who was instrumental in bringing this precious acquisition to us.

The scientific name of the giant sable antelope is *Hippotragus niger* sub-

species *variani*. It was described in 1917 as a local race of the species known since 1834 and inhabiting the tropical region of eastern Africa as far as the northern Transvaal. The ordinary sable antelope was originally discovered in 1836 by Sir William Harris and was characterized by Gordon-Cuming, the great African hunter, as "one of the loveliest animals which grace this fair creation."

The specimen on which the original description of the giant sable antelope is based was an incomplete one consisting only of the head, which was presented to the British Museum as the "type" of the new subspecies. The author of the description, Oswald Thomas, recognized in this animal certain characteristics which would almost warrant the establishment for it of a status of specific independence, and it was only with a certain hesitation that he assigned to the recent discovery merely a subspecific taxonomic position. The main distinguishing marks of the new antelope consist in its larger size; certain differences in the coloration of the head, which is predominantly black; and most particularly in the far greater development of the splendid arched horns.

The discovery of the giant sable antelope settled the mystery of a solitary piece, an oversized antelope horn measuring sixty-one inches, preserved in the Museum of Florence. This object, as it is now quite apparent, was an unrecognized document that failed to anticipate at an earlier date the description of our antelope. Parts of another specimen, consisting of horns of unusual size and also unquestionably belonging to the same race, were recorded by Bocage in his paper on Angolan mammals. The extreme rarity



#### THE CARNEGIE MAGAZINE

of the animal was responsible for such cases of concealed and misinterpreted identity, until finally the magnificent Angolan race was established as the most recent and important addition to our knowledge of the family of antelopes.

The fine bull shot by Mr. Pulitzer is shown in our newly completed habitat group amid the picturesque tropical scenery of its home country. The silken sheen of the splendid black coat contrasts with the rich foliage of the surrounding shrubs and trees scattered on the grassy plain. A distant panorama of hills and the evening glow on the clouds complete a setting of exceptional attractiveness. The group was executed by our chief taxidermist, R. H. Santens, with the assistance of James Haywood. The mounting is an excellent piece of taxidermy rendering the characteristic features of the spirited animal. The elaborate reproduction in wax of the vegetation, including leaves and many native flowers, was skillfully

executed by Anna M. Dierdorf, and partly by Mr. Haywood. The background was painted in an effective way by Ottmar F. Fuehrer.

The giant sable antelope group in the Carnegie Museum is the sixth of its kind among museums of this continent; the other institutions displaying the antelope in its natural haunts are the United States National Museum in Washington, the American Museum of Natural History in New York City, the Field Museum in Chicago, the Museum of Comparative Zoology in Cambridge, and the Academy of Natural Sciences of Philadelphia. The specimens of the antelope preserved in these museums were brought by the Angolan expeditions of Arthur S. Vernay and Prentiss N. Gray.

With the completion of this new group in the Carnegie Museum we wish to renew the expressions of indebtedness to the generosity of Mr. Pulitzer and the obliging courtesy of the Portuguese authorities in Angola.



A TRUCK TRAIN OF THE PULITZER PARTY TRAVELING THROUGH MOUNTAINOUS ANGOLA

## TEACHING THE STUDENT ARTIST

*An Exhibition by the Department of Painting and Design of the College of Fine Arts at the Carnegie Institute of Technology*

How define an artist? First and foremost it is granted that he is an individual blessed with a God-given creative touch that is the wonder and envy of the less favored. After that point is acknowledged and full credit is bestowed, however, envy is sometimes inclined to give way to a feeling of pity. Perhaps it is the means by which the more prosaically endowed console themselves because they are not a part of the charmed circle. But what gives rise to such an unfortunate feeling? It is bound up in the persisting idea that where goes talent, there goes impracticability.

This idea is the sad survival of a not-too-distant period in art in which the artist was an incurable romanticist who delighted in and played up his picturesque position in life, and who rather took pride in his divorcement from reality and a workaday existence. He was the natural reflection of a superficial and ornate day which has come—and gone. Thankfully, the echo of his type is becoming fainter and fainter, but the masses, who are always about thirty years behind the times in their grasp of art, have insisted on clinging to an outmoded impression.

How the idea of impracticability has grown up is easily understandable but that the characteristic should be fastened on all artists as a class is not only unfair but untrue. For it can be immediately pointed out that it is not a condition inseparable to the artist through the centuries. We have but to survey history to disprove it. Who would call the artists of Periclean Athens and Renaissance Florence—to cite the most obvious—one-sided and trivial? They followed up their theories with the most practical of applications. Consider Phidias, who could conceive

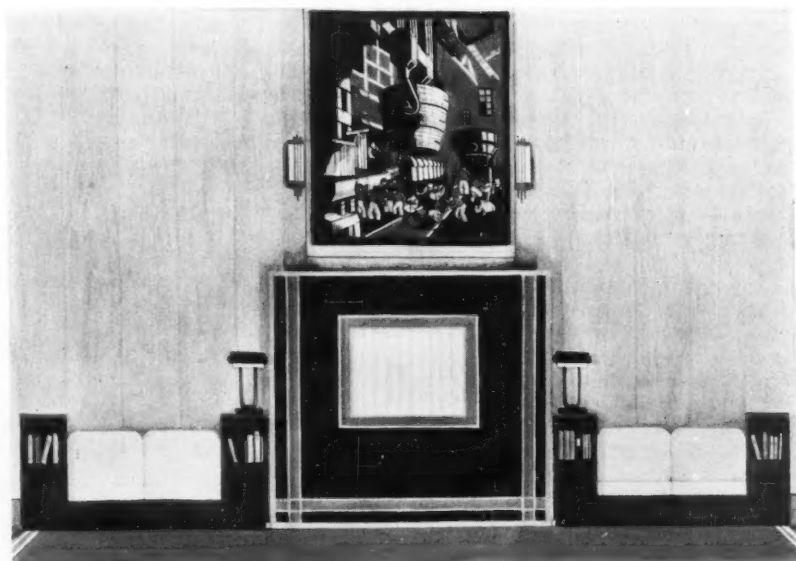
the whole scheme of decoration of the most famous building in all architecture, direct its execution, and himself create the finest sculpture of all; or the artist-statesman Rubens, who as ambassador to Spain was as much at home in royal courts as in the studio; or the versatile da Vinci, who to his rôle of painter added those of inventor, engineer, botanist, astronomer. Such men held an indisputable position in society—they were first necessities and their presence in the pattern of life was not only decorative but indispensable.

This classic place, then, which is unquestionably the artist's by right, must be restored, and it is art training such as is provided by the Department of Painting and Design of the College of Fine Arts at the Carnegie Institute of Technology that is hastening the restoration. Some years ago the faculty of this Department looked out upon this exacting age and saw many an artist who was not turning his ability to practical account. They were enjoying themselves thoroughly so long as they could express their artistic ideas according to their own fancy-free specifications, but as soon as they were forced to conform to the confining requirements laid down by the buyer of talent, bewildering difficulties seemed to arise.

Talent and originality were no less abundant; the fault must therefore lie in the method of training. The Department took the stand that it was unjust to allow a student possessed of a precious gift to spend four years at art school without some assurance that that gift with proper striving would yield him a commensurate return when he sought to apply it to contemporary needs. With this goal in mind the faculty set out to evolve a plan of art



THEATER BALCONY  
BY A JUNIOR STUDENT IN ILLUSTRATION



STEEL—AN INTERIOR FOR EXECUTION IN MICARTA AND FLEXWOOD  
BY A SOPHOMORE STUDENT IN ADVANCED DESIGN



THE MARKET—A BEGINNING PROBLEM  
BY A SOPHOMORE STUDENT IN PICTORIAL STRUCTURE

training which has resulted in a method which, if not absolutely unique in the conduct of art schools, is certainly uncommon. That it will become increasingly common as the fruits of the Carnegie plan become more extensively known is certain.

The background and development of an artist are fundamentally the same the world over—artistic principles and techniques remain unchanged. There are several ways in which these principles and techniques can be attacked, however. The particular policy pursued at Carnegie is designed to cultivate in the student, coincident with his artistic emergence, certain broad mental characteristics which will make for flexibility, self-confidence, reliance, and resourcefulness—all essential attributes to the adaptable artist for whom the times are calling.

To attain these attributes in their students, the faculty follows a coordinated system of teaching that has been the outgrowth of much serious thought and much weighing of comparative results. Constant faculty conference produces a harmony of artistic purpose, a

reconciling of the aims of each instructor without sacrificing his own artistic identity, his supremacy in his own realm, or his freedom of thought. The outcome is that there is an orchestrated teaching which does away with the solo work so frequent in art schools where names and fames are capitalized to such a degree that the student slavishly labors to copy the style and imitate the master, instead of endeavoring to develop his

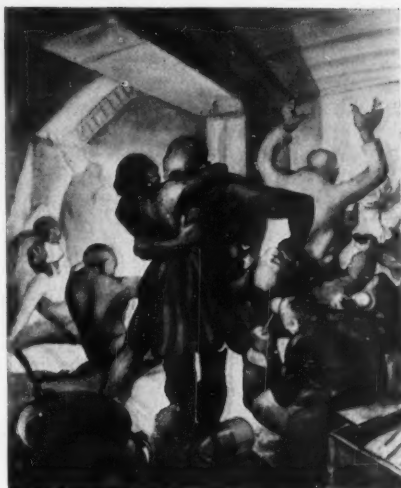
own creative powers. Thus, while each instructor is supreme in his own field, he teaches always with the general art experience of the student in mind, so that there can be achieved a continuity and integration of training, a flow of related ideas and principles from one class to another, from one year to the next. The admirable result is that the student is relieved of the strain of adjusting the varied viewpoints he encounters, confusion is reduced, and his productivity gains immeasurably.

Most laymen think of an artist as a specialist—and often he is. But the Department of Painting and Design considers this a misfortune, not an advantage; for it contends that specialization is short-sighted and therefore a deliberate injustice to the student. In a ruthless and racing age in which one invention displaces another before we have fairly got acquainted with the old one, in which one mode of transportation makes obsolete another before we have had time to exhaust the possibilities of the first, an artist can find his once-popular specialized training quite as suddenly out of fashion and

as hopelessly ignored. To anticipate such a discouraging, but not unlikely, turn of fate, all concentration is placed on constructing an attitude of mind in the student so that he will be ready to adapt himself to any changing taste on the part of the fickle public, to any revolutionary product that will prosper under unprecedented interpretations and executions.

The young artist is invariably influenced by the art styles of the day and he as invariably thinks that he wants to spend most of his time on that branch of art in which his greatest proficiency and preference lie; and most art schools comply with such dictation. This is exactly what the Carnegie student is not permitted to do. He is not allowed to narrow himself to the passing horizon of 1933; and his whims are not catered to. Instead, he is directed to take the long view of enduring art; he must try every tool by which art is expressed, every medium by which it is reproduced. Some mediums and tools, because of natural aptitudes, he will master more perfectly than others but in so doing, he has acquired a working knowledge of them all.

After he has had this invaluable



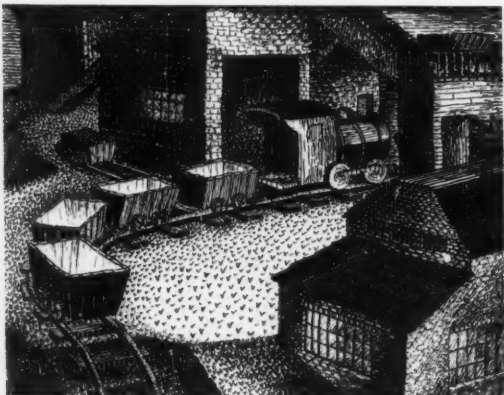
NEW ORLEANS

BY A SENIOR STUDENT IN ILLUSTRATION

generalization, which occupies the first two years of his four-year course, he may then return to his first love; but not infrequently it happens that by that time the emphasis has shifted to a new field which may be even more in harmony with his talent and which would otherwise have remained unknown to him. To explore the use of a technique

in which he has assured his instructors that he has no interest is excellent discipline for the untried artist and an effective way to prepare him for the variety of situations with which he is bound to cope when he sets out on a career.

To surround the student with as many artistic situations as possible and to produce those natural conditions under which genius best germinates and flourishes is the unswerving goal of the Department of Painting and Design. It does not claim to make the creative grow where it does not



MINEHEAD

BY A FRESHMAN STUDENT IN PICTORIAL AND DECORATIVE DESIGN



exist, but it is constantly proving that—given the potential seed—it can bring about a very practical flowering.

A very simple definition of an artist is often heard at Carnegie: an artist is one who sees something and does something about it. The moral to be drawn is that all men see, but few are so gifted by nature as to be able to do something about it. If the artist, born with a special power of expression, does nothing about it, he is refusing to share his creative joy and therefore scarcely deserves much recognition by society. To be aware that you have a contribution to make to life is a great spur to action. The remainder of the current definition is: an artist is one who accepts limitations and enjoys them. While doing is half the battle, to win he must be able to face restrictions and to like them. If he can fulfill the requirements of such a definition, he will be ready for anything his artistic task may demand of him.

Perhaps some of these underlying principles of teaching may explain why the Painting and Design alumni have maintained such a high record of employment in these recent depression days, when artists are often considered luxuries and hence the first to feel curtailment. Perhaps they may furnish reasons for an enrollment that has known little decline in spite of the times, an enrollment that must be selected by competitive art tests—a unique procedure in art schools—to keep the size of the classes within the capacity of the College.

Perhaps they may account for the vitality and sureness which mark the best productions of the four classes for the school year that has just closed. There are no labels on the individual pieces—no exploitation of student personalities—but anyone who is interested in seeing the grand sweep of accomplishment and the quality of art coming out of Carnegie should take in the exhibition in the College of Fine Arts, where it will remain throughout the summer.

E. R. A.

## ART SUPPORT IN 1932

THE American Federation of Arts reports that in a year as dull financially as 1932, a partial list of gifts and bequests to museum funds totaled \$5,337,410. The total income to art museums from all sources for the past year is estimated at over \$12,000,000.

No figures are available on the value of objects and collections given to museums in 1932, but the wealth of many museums has been materially increased by such transfer of works of art from private to public ownership and public enjoyment, and by the appreciation in value of existing collections. The lowest figure of five independent appraisals estimated this increase at approximately 10 per cent.

## THE COSTUME ROOM OF THE TECH LITTLE THEATER

SINCE the inauguration of the Department of Drama at the Carnegie Institute of Technology, the costume room has amazingly spread from a mere handful of costumes used in the first production until it now fills two rooms from floor to ceiling. Many of these costumes have been made by the students; but a great many may be traced to the generosity of patrons and friends of the theater, who have presented anything from a box of dress accessories to a trunkful of complete costumes, some made and worn by aunts and uncles and grandparents of our present generation, or that generation itself; others planned for the stage and worn by famous actors and actresses.

There has been an unending list of donors who have presented gifts to the wardrobe since 1913, among the most recent of whom are Mrs. Elizabeth Moorhead Vermorcken, Mrs. George McCann, Miss Emma Suydam, Henry Hornbostel, Mrs. Edward Keeble, Mrs. John Stolzenbach, Madame A. W. Sparks, Mrs. Edward Rynearson, and Miss Cole.

## THE PIPES O' CARNEGIE

### *A Rebuilt Organ and Two New Pianos for Carnegie Music Hall*

IN years past the free organ recital season in Carnegie Music Hall has had its conclusion with the end of June. This year, however, the season ended on June 11 so that work could be begun immediately on the reconstruction of the organ, which has naturally suffered deterioration through the years since its last rebuilding under Dr. Heinroth's direction. About a third of the pipes are to be completely renewed, a new console—or player's keyboard—will replace the present one, and some new pipes, unique in organ construction, will be added. To effect these complicated changes the entire summer will be occupied in preparing for the opening in the autumn of the thirty-eighth concert season. The next organ program that will be heard will be the 2,791st free recital to be given in the Institute.

When the Carnegie Music Hall organ was presented to Pittsburgh in 1895, coincident with the gift of the Carnegie Library, it was thought to be one of the superlative instruments in the country, and that reputation it has upheld in good part through the years. On no musical instrument more than the pipe organ, however, has modern mechanical knowledge been recently applied with so much success and skill; and it is for the purpose of incorporating these extraordinary improvements in the voicing of the organ pipes that the work is being done.

The organ will be only increased in size to the extent of eight additional stops, operating 897 new pipes. Of the 110 stops which now make up the organ, twenty-nine of them, controlling 2,800 pipes, will be either completely revoiced or replaced. Artistic effects and tonal results hitherto unattainable will thereby be made possible. All of these renewals and additions, especially de-

signed and almost entirely fabricated by hand, will be executed by the Aeolian-Skinner Organ Company, creators of most of the fine cathedral and university organs throughout the United States.

When Marshall Bidwell was appointed as organist and director of music in succession to Charles Heinroth, it was thought best that while the organ as it then was should be kept in perfect repair, these rebuilding plans should be held in abeyance until he had had the experience of a year's playing on the instrument in order to give him a perfect familiarity with its permanent needs. These radical changes have now been arranged under Mr. Bidwell's expert advice. When the new concert season opens, it is thought that lovers of the organ will observe a tremendous difference in the general effect and a new brilliancy and magnificence of tone quality which cannot be excelled by any existing organ.

As a further improvement in the perfect equipment of Music Hall the trustees have ordered two new concert grand pianos, which are now under special construction in the Steinway factories. These pianos, one of which can be played from the organ console, will be in an ebony finish and will be built especially for concert work.

The Carnegie Music Hall organ was one of the very first that Andrew Carnegie ever gave, but he continued to give them throughout his fruitful lifetime until his organ gifts alone reached the amazing number of 7,636. As a lad in his native land he knew only Psalter singing and the playing of the bagpipes. Not until he came to America had he ever heard a great organ. Yet the joy of magnificent music as it comes from the multicolored throat of the organ he has shared with countless thousands.



## "THE PLAY'S THE THING"

*A Review of Don Totheroh's "Distant Drums"*



By HAROLD GEOGHEGAN

*Professor of the History of Art, Carnegie Institute of Technology*



CHESTER WALLACE, who earlier in the year gave us such an excellent production of Susan Glaspell's "Alison's House," turns once more to the American past in Don Totheroh's "Distant Drums."

This time the past is more remote—the period of the pioneers of the Oregon Trail.

Mr. Totheroh is the author of a play called "Wild Birds," and of a number of one-act plays much beloved of experimental theaters. The present play had a fairly successful production in New York last year.

The scene of "Distant Drums" is the encampment of a band of pioneers from New England on the Oregon Trail. The picturesque semicircle of the covered wagons forms the scene throughout the three acts of the play. Bad luck has befallen the pioneers: the rations are low and must be carefully guarded, cholera breaks out, they are high up in the mountains, and winter is closing in. Hunger, disease, and cold are depressing them, and the nightly drumming of the Indians is getting on their nerves. They have lost the trail, and only the Indians can find it for them again. The Indians, however, through the intermediary of an old trapper who speaks their language, are apparently unwilling to help, although gifts of rifles have been offered them. The leader of the party is a harsh, elderly man, Harris Wolfhill, whose young wife Eunice is strangely attracted by the Indian drums. On one occasion,

accompanied by Jason Allenby, who is in love with her, she steals out of the encampment and watches them at their ritual dances. Eunice is a mysterious and disturbing person to the other pioneers—among other things her grandmother had been burnt as a witch—they feel sometimes that she is the cause of their misfortunes. And so she is, according to Mr. Totheroh, because it turns out that what the Indians ask as the price of their information regarding the trail is the white squaw herself. As the curtain falls, Eunice is seen going out to join them.

"Distant Drums" is a sincere piece of work and quite worth the performance. The writer has something to say and occasionally a beautiful way of saying it. But there is a naïveté about the whole play that a dramatist with Mr. Totheroh's experience ought to have got over by now. The plot is frankly absurd. The call of the wild which Eunice Wolfhill hears, and her malaise in her present surroundings is not always much more comprehensible to the audience than it was to her fellow travelers. It is possible that the lack of subtlety in the writing of the part of Quincy Bridleman, the old trapper, the link between Eunice and the mysterious Indians—who, by the way, never appear—is responsible for this. The part of Bridleman seemed to me just a character out of the old melodrama. It certainly was played—and played *con amore*—as such. There is also something amiss with the writing of the character of Jason, or at least with the speeches that are put into his mouth. The love scenes between him and Eunice always made the audience laugh a little, yet the actor who took the part of

Jason played it sincerely and in a straightforward manner. The shrill women and the yellow Clemens were, I suppose, meant to be comic relief. They were neither; and the final scene with the whole encampment describing to each other the killing of Jason and the reception of Eunice by the Indians was clumsy in the extreme.

Yet, in spite of these quite obvious defects, "Distant Drums" has a certain distinction and some moments of great beauty, and is worth many a better-made routine play. Eunice's description of the Indian dances that she and Jason have watched while crouching in the bushes is a fine piece of writing. The frayed nerves of a whole group of people cooped up in too narrow a space is admirably brought out. Indeed the atmosphere of the play surpassed both the action and the characterization.

Mr. Wallace directed "Distant Drums" ably as usual. The quieter parts were impressive, and the mood of the play, when the author himself did not break it, was skillfully suggested. The melodramatic passages were not shirked.

The performance was satisfactory enough. There were some pleasant sketches among the minor characters: the farmer's wife, Molly Pike, for

instance, and the blacksmith and the distraught young wife of Clemens. Two actors of the major parts we saw for the last time on this stage; Fern Ball as Eunice and Robert Gill as Wolfhill. The former gave a very moving performance of the haunted—and rather muddle-headed—heroine; the latter, as the stern and rock-bound Wolfhill, showed once more what a versatile actor he is. In the four years that Mr. Gill has been with the Tech players, he has played a great variety of parts, ranging all the way from farce to high tragedy—from the young swell in "The Ticket-of-Leave Man" to Cardinal Wolsey, from the insufferable Boy-Socialist in Mrs. Gaul's play to the sinister Tessier in "The Vultures." I have never seen him give a careless or unintelligent performance. Miss Ball's range is narrower—or perhaps it is that she has not been cast in such strongly differentiated parts—but her Anne Vroome, her Nina in Chekhov's "Seagull," and her Queen Katharine are pleasant memories. Good luck to both of them! They will be missed.

[It is a coincidence that since Mr. Geoghegan's judgment of Miss Ball and Mr. Gill was written, they have been announced as the 1933 winners of the Otto H. Kahn Drama Prizes.]



SCENE FROM "DISTANT DRUMS"—STUDENT PLAYERS



#### JAPAN AND CHINA

IN the last days of President Hoover's administration a new "Hoover Doctrine" was promulgated whereby it was declared that the United States would "never" recognize any government that might be established over territory acquired by force. This statement attracted wide attention from the fact that it was indisputably aimed at the government which Japan had just set up in the Chinese province of Manchuria. The new Hoover policy constituted an advanced system of international morality which might have won the admiration of the world had it not been a negation of many acts of territorial expansion marking the history of the United States. To be consistent in our new virtue would have required us to restore Texas to Mexico, Panama to Colombia, and the Philippines to Spain, with many minor adjustments of our predatory growth; while if this "Hoover Doctrine" were applied to John Bull, the British Empire would straightway dissolve and leave not a rack behind.

What are the facts as to the Manchurian invasion? China had granted certain neighborly privileges in Manchuria to Japan, among which were the right to build a railroad and to enjoy the reciprocal facilities of trade. All went well until the ancient empire of China was rent asunder by civil war and revolution, in the course of which Manchuria succumbed to banditry and

anarchy. The Japanese railroad was torn up, bridges and stations were burned, a large Japanese population which had moved into Manchuria was subjected to every form of outrage and death, and at last a boycott against trade with Japan extended itself throughout the whole vast territory of China, affecting not only the economic life of Japan but causing such severe national malnutrition as to threaten physical degeneration among the Japanese people.

In such a situation Japan took the course which any strong nation would take with a decadent neighbor—the course which the United States and Great Britain have always taken in similar circumstances on much less provocation; she moved her armed forces into Manchuria and, after a period of stiff and costly fighting with the Manchu bandits, she restored order and established a government by Chinese officials, the chief of whom was the former emperor of China. When the various war lords of China opposed her constructive and civilized course, Japan pursued her pacification as far as the Great Wall; and when the war lords still got in the way, she stipulated for a buffer piece of land beyond the Great Wall, in order that her policy of peaceful domination might be successful. The period of robbery, kidnapping, and murder is now ended, and in its place is a well-established protection of life and property and a rapidly growing system of civilization



extending into the remotest sections of these afflicted lands. This is shown in the attack which Japan has made upon cholera, which has been epidemic in Manchuria for centuries. The first fruits of her conquest were the distribution of sterilized water to the native inhabitants, accompanied by medical treatment and instruction which have already eradicated that dread disease. Japan has now begun the development of an educational system, out of which the intellectual progress of these pacified regions will keep pace with the spread of their economic and industrial activities.

In this way Japan is vindicating her solemn treaty rights and accomplishing her natural development—as we developed ours—while at the same time she is extending a modern and beneficent civilization over a vast section of the world which, but for her, would probably have struggled on in a welter of banditry and outrage for centuries in the future.

Has not Japan rendered a great service to humanity in doing this imperative work? And would it not be the height of folly—and the depth of hypocrisy—to apply this untenable "Hoover Doctrine" by refusing an official recognition of the orderly and humane governments which Japan is establishing in these troubled regions? Now that Japan and China have signed an agreement of peace and friendship, we have a better and a safer world because of Japan's crusade for right and law and order.

#### LET'S CANCEL THE WAR DEBTS

THE American people are influenced by two very misleading fallacies in their understanding of the war debt situation. The first one is the frequent statement made by careless-speaking politicians and journalists that we have already canceled \$7,000,000,000 of the sums owed us on this account by our former Allies, and that therefore they should not in all decency ask us for any

further reductions. This statement has been made, just as we have put it here, by Senator Borah. But the opinion is not correct. No part of the war debts has ever at any time been reduced by the United States Government. What people who know the facts mean when they speak of reduction is that a theoretical rate of interest of  $5\frac{1}{2}$  per cent was the rate of interest set forward by the United States Treasury officials when the war debt negotiations were begun; and that when the capacity to pay was examined, these interest rates were reduced to  $3\frac{1}{2}$  per cent, and in some cases much lower than that; and that these reductions in the interest rates, when extended through sixty-two years, would amount theoretically to something like the sum named. The fact is that when we advanced our Allies \$10,000,000,000 to keep the war going until we could get our army across the ocean fifteen months later, we very plainly assured them, through the speeches of our senators and representatives in Congress, that we did not expect any part of this loan to be paid; and yet the sum we are demanding, on an original loan of \$10,000,000,000, amounts with interest to \$21,000,000,000. As an illustration of the hardship of this burden, we should take the case of Great Britain, where having relinquished her payments of reparations from Germany, her labor population will have to produce work to the value of \$500,000 every day in every year for sixty-two years for payment to our country before the British laborer shall begin to earn his bread.

The second fallacy is the general belief that as Great Britain and France have very large supplies of gold, they are abundantly able to pay the whole amount of their war debts to us without inconvenience to themselves. But this theory violates every known principle of economic experience. There is only one way in which those nations could pay, and that is by an excess of exports to the United States beyond the amount of their imports from us equal-

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ing the amount of the war debts. And that is outside the range of possibility. To ship the naked gold would be to sacrifice their capital; and this process, on any such scale as we are here considering, would bankrupt any nation that attempted to do it.

Secretary Mellon once said: "A prosperous Europe would be worth far more in dollars and cents to the United States than any possible returns from debts."

The world can never rise out of the wreck and ruin of the war until all of these debts are completely liquidated by a universal cancellation.

In the event that political and journalistic opposition to immediate cancellation should continue, we hope that the debtor nations will make a counterclaim against us for our full proportion of the costs of the war, the items to include pay and subsistence, land damage, and a fair evaluation of the human sacrifice through all that long period of our heartbreaking absence from the battle front. Then let one bill cancel the other.

## RADIO TALKS

[Introducing the new series, entitled "Summer: Nature in the Sunny Days," broadcast over WCAE on Monday evenings at 6:45 under the auspices of the Section of Education of the Carnegie Museum.]

### JUNE

- 26—"The Attractions of Camping," by Jane A. White, assistant curator of Education.

### JULY

- 10—"Fishing in Our National Parks," by Arthur W. Henn, curator of Ichthyology.  
17—"Birds and Their Young," by Reinhold L. Fricke, preparator, Section of Education.  
24—"Hunting Arrowheads," by Mr. Fricke.  
31—"Some Dwellers in Fresh Water," by Stanley T. Brooks, curator of Recent Invertebrates.

### AUGUST

- 7—"Some Fresh-Water Friends," by Dr. Brooks.  
14—"Our Smaller Fresh-Water Friends," by Dr. Brooks.  
21—"Shells and the Human Race," by Dr. Brooks.  
28—"Nearing the End of Summer," by O. E. Jennings, curator of Botany.

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